



# NORTHWEST FIRE SCIENCE CONSORTIUM

The Northwest Fire Science Consortium is part of a national network of consortia established by the Joint Fire Science Program to accelerate the awareness, understanding, and adoption of wildland fire science information by federal, tribal, state, local, & private stakeholders in the PNW

*Annual  
Report  
FY 2017*



**Northwest Fire Science Consortium  
Annual Report for FY 2017 Narrative  
Reporting for October 2016 through September 2017**

As was reported in the Northwest Fire Science Consortium's (NWFSC) renewal proposal, in order to help inform our plan of work for FY 17, 18, and 19 we took a straw poll of our list serve members, and Facebook and Twitter followers to get an idea of the priority topics in the region moving into 2017. There were 50 respondents: 20 researcher/scientist, 19 manager/practitioner, and 11 other. Participants were asked to rank the top priority topics for the NW region. The 6 topics ranked as high priority were: Climate and Fire (79%), Drought and Fire (69%), Fuels and Fuel Treatments (61%), Prescribe Burning (61%), Post-fire Management (51%), Restoration (51%). We addressed these issues in FY 2017 and will continue to focus on them in the coming years. After the intense 2017 fire season, it is clear that post-fire management and restoration continue to be at the forefront of research and management needs. The NWFSC will continue to focus on those priority areas established at the beginning of this current funding cycle:

- PA #1) Smoke in Washington and Oregon: air quality and cross-boundary issues with prescribed fire;
- PA #2) Post-fire management and restoration;
- PA #3) Landscape level planning: collaborative natural resource management and coupled human and natural ecosystems;
- PA #4) Managing fuels and fuel treatments in a changing climate.

This report will highlight the activities of the NWFSC during FY 17 directed towards these areas.

During this past year the NWFSC has begun contacting the PI's of JFSP projects that were completed in FY 17 or close to completion. Since 2013, the NWFSC has provided letters of support for many research projects. Most of these letters detailed agreements made between the NWFSC and the research teams to collaborate on the dissemination of research results; most often as a webinar or research brief. We have been mildly successful to date (i.e. JFSP project #14-2-01-29). However, we are just beginning to make the effort to reach out to researchers and we anticipate more participation during FY 18.

**Awareness**

The NWFSC decided to take a more strategic approach to our social and electronic media outreach efforts. We reduced our online newsletter to a once a month delivery resulting in a higher level of engagement of our subscribers, with an average 37% open rate and 13.4% click rate. Subscribers to our list serve has grown from 441 in FY16 to 600 at the end of FY17. Our Facebook followers increased from 506 to 614, and Twitter from 1420 to 1824, with an average of 10,358 impressions per month.

For the NWFSC Research Briefs we focused exclusively on newly published research, producing 5 new briefs addressing our priority areas.

- #10 – [Post-fire logging: Examining long-term effects on understory vegetation](#) (PA #2)
- #11 – [Pathology of wildfire risk: A characterization of social and ecological dimensions](#) (PA #3)
- #12 – [Landscape-level prescriptions: A new foundation for restoration planning](#) (PA #3)
- #13 – [Contracted suppression resources: Private engine dispatch and sharing in the Northwest](#) (PA #3)
- #14 – [Engagement strategies: Helping facilitate development & implementation of adaptation options](#) (PA #4)

The NWFS Fire Facts are increasing in their popularity. They are quickly picked up from our display tables during conferences and meetings, especially those who work with communities and with the public. The focus of the FY17 series was primarily around fire-prone communities: [What is A Fire Adapted Community?](#) [What is CWPP?](#) [What is WUI?](#)

In FY 17 we began to develop some new ways to distribute information that would appeal to our diverse audiences. Where appropriate, we create a portfolio of products stemming from a specific piece of fire science research. For example, from a paper on restoration needs in WA and OR, we produced a research brief, which informed a Fire Fact, and led to a subsequent webinar (Figure 1).



Figure 1

NWFS produced one video during FY17, “Restoring western dry forests: Individuals, Clumps and Openings”. The video was filmed during a workshop illustrating the ICO approach, based on how dry forest structure would be in the absence of widespread fire suppression. In addition, the NWFS provided funding towards the development of an Android app used in the approach.



Click to play

## Understanding

For the FY 17 webinar series we attempted to increase attendance by requiring registration for participants. The result was a modest increase in our numbers, but the real advantage was the growth of list serve subscriptions and web site use. The NWFSC produced 8 webinars during FY 17, all of which are available on our web site under the [“archived webinars”](#) link under the “resources” tab at the top menu. Topics were chosen based upon the relevance to our priority areas:

- 1) Smoke Photographic Guide (PA #1)
- 2) Communication under fire: Understanding capacity for effective communication during large-scale wildfires (PA #2) (*also a Research Brief*)
- 3) Creating fire adapted communities: An interactional approach (PA #3)
- 4) Understanding stakeholder perceptions of fire with mental modelling: A case study from Ashland, OR. (PA #3)
- 5) Making national spatial data work for your NW landscape (PA #3)(*in partnership with LANDFIRE*)
- 6) Rangeland fire protection associations in Oregon and Idaho (PA #3)(*JFSP # 14-2-01-29*)
- 7) Summary of 2016 Fire Season (*offered every year*)
- 8) Outlook for 2017 fire season in WA and OR (*will begin offering every year*)

## Learning

The NWFSC sponsored 5 workshops/conferences, and 3 field tours during FY 17. The field tours and 3 of the workshops were focused on addressing the needs of the 35 Forest Collaboratives in Washington and Oregon, and were led by one of our long standing partners, Sustainable Northwest. (PA #2, #3)

NWFSC also provided support, both financial and in person hours, to the Rural Voices for Conservation Coalition (RVCC) — a group we began to support in 2016 through another NWFSC partner, the Ecosystem Workforce Program at the University of Oregon, who sits on the RVCC board of directors. (PA #2, #3)

The NWFSC was proud to sponsor an Era of Megafires event for the Corvallis area. We partnered with the OSU College of Forestry and the OSU Forestry and Natural Resources Extension Program to bring Paul Hessburg to campus. The event was attended by 150 people. (PA #3)

Following upon the advice of our advisory board, the NWFSC held a regional summit focused on fire regimes in forests and grasslands on the west side of the Cascade Crest in Washington and Oregon: *“Fire in the Pacific Northwest – Past, Present & Future: Implications for ecology, operations, and restoration west of the Cascade Mountains.”* The event brought researchers, federal and state managers, NGO’s, county and city government together to:

1. Learn, review and discuss the available science on Westside fire regimes and implication for forest, woodland and grassland management, community preparedness and, where appropriate, restoration needs and current activities;
  - Understanding the historical, current, and future role of fire in Westside systems
  - Discuss the opportunities and barriers of using fire as a tool to accomplish restoration and restoring the process of fire
  - Understanding what changes are occurring in Westside fire regimes
2. Identify challenges and research gaps;

3. Determine strategies/tools to assist land managers and communities in the WUI; Presentations and subsequent discussions during breakout sessions were captured with the intent to develop a list of research needs. The NWFSC received funding from the Oregon Forest Resources Institute (OFRI) for the summit. Other significant partners include the USFS Region 6, PNW Research Station, OSU Forestry and Natural Resources Extension Program, and the Center for Natural Lands Management. (PA #1, #2, #3, #4)

The NWFSC collaborated with OSU Forestry and Natural Resources Extension Program to develop a [Fire Science Core Curriculum](#) (EM9172) designed to teach the basics of fire to non-fire professional community members, including instructors and landowners such as ranchers and farmers. The curriculum consists of 5 modules ranging from “*What is Fire*” to “*Fire Prevention for Home and Landscape*”. Each module is complete with learning objectives, discussion questions, background material, PowerPoint slides, in the field exercises, and evaluation instruments. This curriculum is published through OSU Extension Service and is available for download. (PA #3, #4)

### **Partnerships**

Collaborations and partnerships provide the foundation for the NWFSC’s ability to do work and leverage resources. The relationship we developed with OFRI continues, and they have become an important source of additional funding.

The NWFSC continues to build a partnership with the Western Coordinating Committee for Extension Forestry Activities (WCC1003), a federally recognized group developed to meet the requirements of the Agricultural, Research, Extension and Education Reform Act (AREERA). There is great interest on the part of the WCC to collaborate with the JFSP Fire Science Exchange Networks in the west on the dissemination of emerging fire science with relevance to the Extension audience.

Other ongoing NWFSC collaborations include The Nature Conservancy, Fire Adapted Communities, Oregon State University Extension, the Center for Natural Lands Management, US Forest Service Region 6, PNW Research Station, and the Pacific Wildland Fire Sciences Laboratory. As always, the NWFSC partners with other Regional Fire Exchanges in the network when it is appropriate and beneficial to do so.

### **Governance**

In 2017, the PI for the NWFSC, David Seesholtz, left his position with the PNW Research Station. As of this writing a replacement for David has not been identified by the PNW Research Station. Nonetheless, we continue to function effectively and efficiently. It is our hope to have this situation rectified in FY 18. There are no changes in our Management Committee.

We have made a couple additions to our advisory board:

Morgan Varner – USFS PNW Research Station - Pacific Wildland Fire Sciences Lab

Josh Clark – Washington Department of Natural Resources

Craig Glazier – USFS Region 6